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translation of this cover

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90814MR



NEW ZEALAND QUALIFICATIONS AUTHORITY
MANA TOHU MĀTAURANGA O AOTEAROA

QUALIFY FOR THE FUTURE WORLD
KIA NOHO TAKATŪ KI TŌ ĀMUA AO!

Te Mātauranga mō te Toitūtanga, Kaupae 2, 2022

90814M Te whakaatu māramatanga ki ngā āhuatanga o te
toitūtanga i ngā horopaki rerekē

Ngā whiwhinga: E whā

TE PUKAPUKA RAUEMI

Tirohia tēnei pukapuka hei whakaoti i ngā tūmahi mō Te Mātauranga mō te Toitūtanga 90814M.

Tirohia kia kitea ai e tika ana te raupapatanga o ngā whārangi 2–15 kei roto i tēnei pukapuka, ka mutu, kāore tētahi o aua whārangi i te takoto kau.

E ĀHEI ANA TŌ PUPURI KI TĒNEI PUKAPUKA HEI TE MUTUNGA O TE WHAKAMĀTAUTAU.

TE RAUEMI A: Te wai – he take hauora tūmatanui ki te katoa o Aotearoa

Kīia ai e te nuinga ko te wai e pai ana kia inumia, he ‘wai inu (potable water)’. Kua ahu mai te kupu
 ki te hanga i ngā ara wai (ngā roma i runga o te papa) i kawē rā i te wai inu i ngā maunga ki ngā tāone.

Te āhua o te ao

Putā i te ao, kei te takiwā o te 771 miriona tāngata kāore nei e whai wāhi atu ki te wai e pai ana kia

a rātou.

Te āhua i Aotearoa

He taonga te wai māori, te wai inu hoki, ā, he haepapa nō te katoa o ngā tāngata i Aotearoa kia

E toru ngā matenga i muri iho e whakapaetia ana ko taua horapatanga te pūtakenga.

RESOURCE A: Water – a New Zealand public health issue

Safe drinking water is most often termed 'potable water'. The word 'potable' comes from the (ground channels) that transported potable water from the mountains to the cities.

Global situation

Globally, some 771 million people lack access to safe water, and up to 1.7 billion people do not

safe water and good sanitation.

New Zealand situation

Fresh, potable water is a taonga (treasure), and it is the responsibility of all New Zealanders

attributed to the outbreak.

Te hōtaka Whakahou i ngā Wai e Toru

Kua māharahara ngā tāngata o Aotearoa ki te āhua o te wai inu mō ngā tau maha, ā, i tohua ki

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He whakaohititanga hauora tūmatanui – te korenga o te wai e pai kia inumia

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Three Waters Reform programme

New Zealanders have been concerned about the state of drinking water for many years, with a

[Redacted]



Public health warning – unsafe water

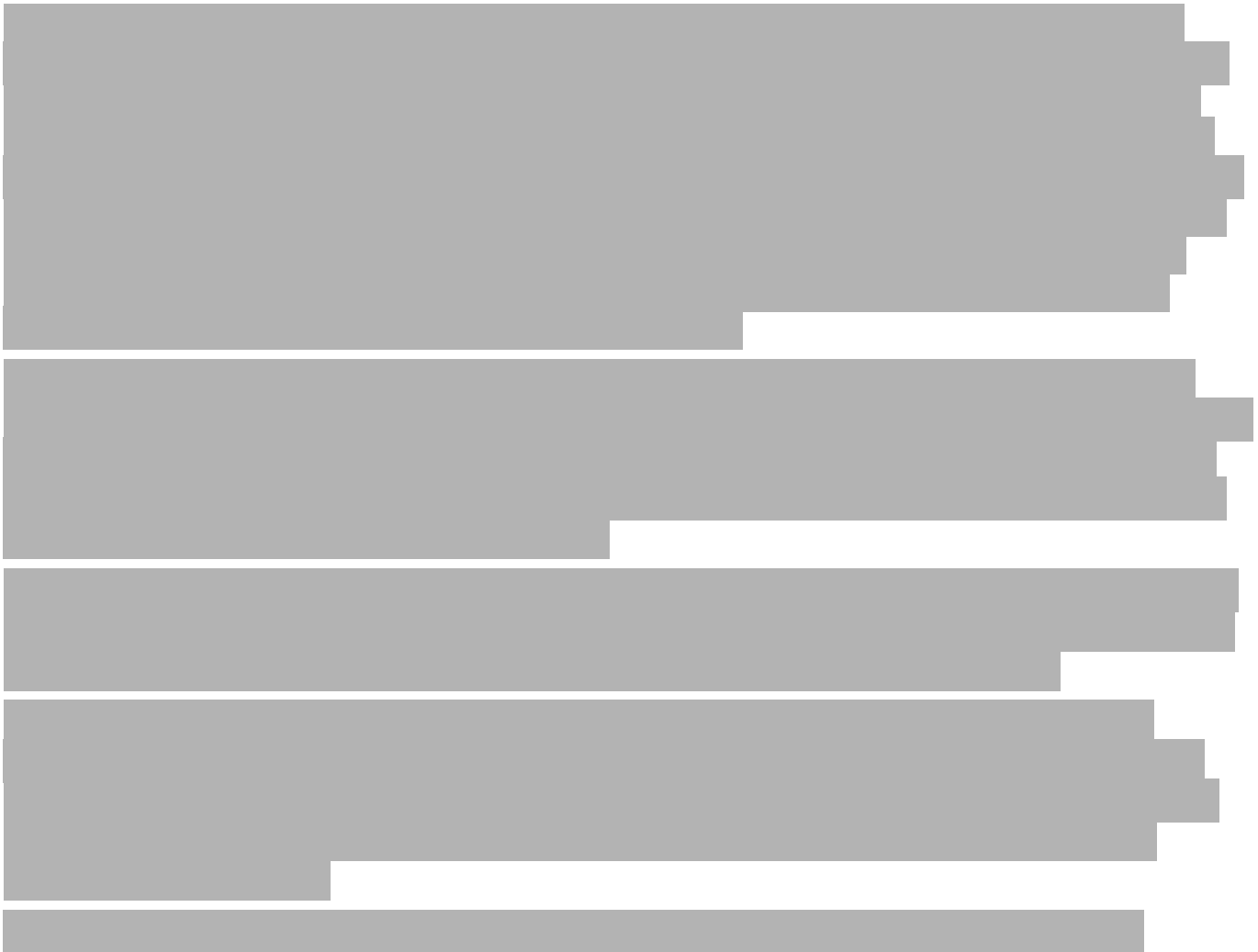
[Redacted]

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Aotearoa – ngā pūnaha o te wai inu, o te wai para, o te wai ua hoki – i mua i a Hūrae 2024.

He mihi

He mea whakahāngai ngā kai o ngā mātāpuna e whai ake nei hei whakamahinga i tēnei rauemi:

<https://water.org/our-impact/water-crisis/health-crisis/> (He mea tiki i te 24/3/22)

<https://www.health.govt.nz/our-work/environmental-health/drinking-water> (He mea tiki i te 30/3/22)

<https://www.beehive.govt.nz/release/government-protect-vital-public-water-services-future-generations>
(He mea tiki i te 20/3/22)

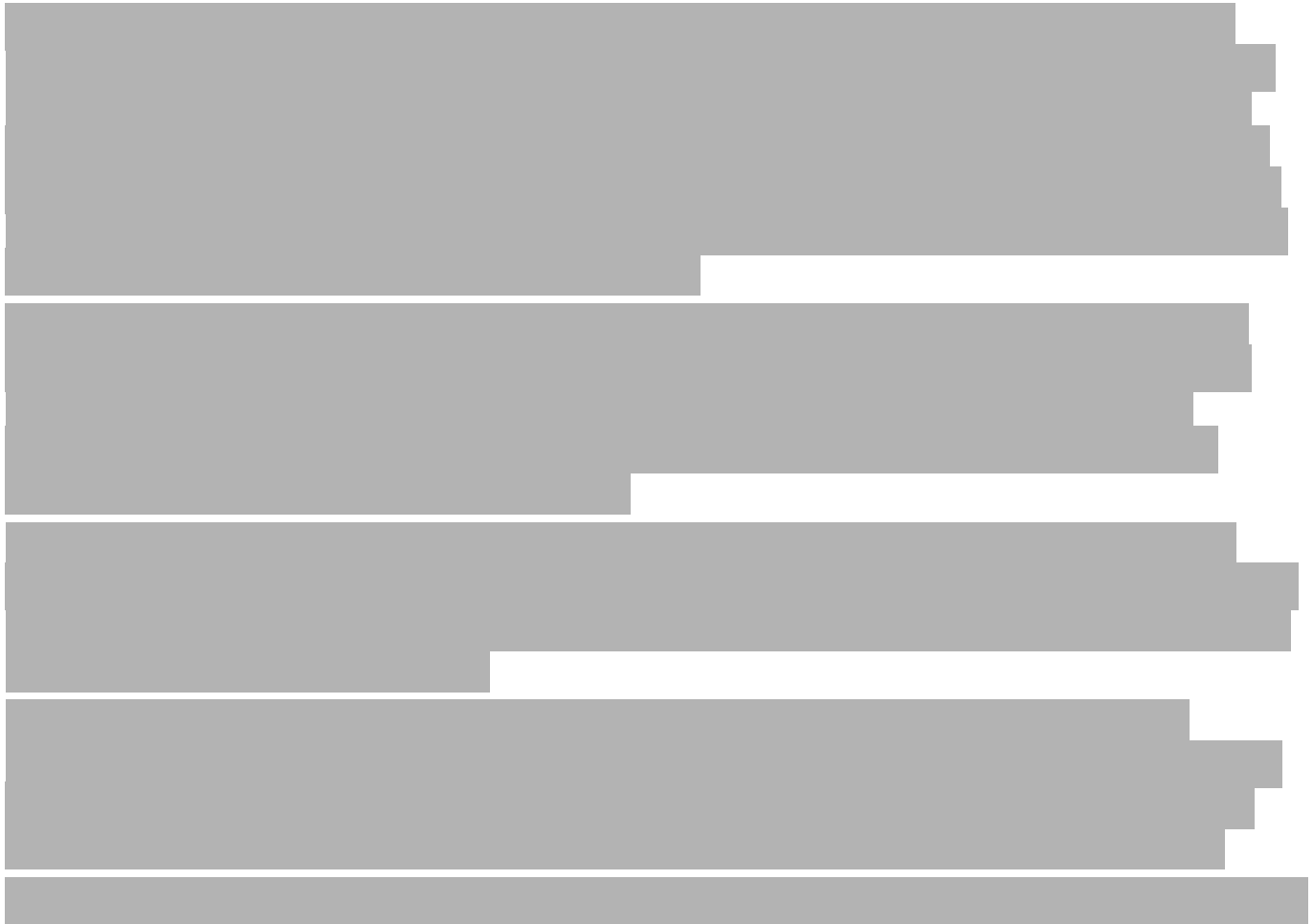
<https://www.dia.govt.nz/three-waters-reform-programme-iwi-maori-interests> (He mea tiki i te 16/3/22)

<https://www.stuff.co.nz/environment/109701626/water-pollution-the-number-one-concern-for-new-zealanders-in-new-poll>
(He mea tiki i te 13/3/22)

<https://www.dia.govt.nz/Government-Inquiry-into-Havelock-North-Drinking-Water-Report---Part-1---Overview>
(He mea tiki i te 13/3/22)

<https://www.stuff.co.nz/national/politics/128489597/government-accepts-three-waters-recommendations-councils-to-have-shareholding-aspects-of-cogovernance-to-remain> (He mea tiki i te 29/04/22)

<https://www.otago.ac.nz/news/news/otago839477.html> (He mea tiki i te 20/04/22)



storm water systems – is scheduled to be completed by July 2024.

Acknowledgements

Material from the following sources has been adapted for use in this resource:

<https://water.org/our-impact/water-crisis/health-crisis/> (Retrieved 24/3/22)

<https://www.health.govt.nz/our-work/environmental-health/drinking-water> (Retrieved 30/3/22)

<https://www.beehive.govt.nz/release/government-protect-vital-public-water-services-future-generations>
(Retrieved 20/3/22)

<https://www.dia.govt.nz/three-waters-reform-programme-iwi-maori-interests> (Retrieved 16/3/22)

<https://www.stuff.co.nz/environment/109701626/water-pollution-the-number-one-concern-for-new-zealanders-in-new-poll>
(Retrieved 13/3/22)

<https://www.dia.govt.nz/Government-Inquiry-into-Havelock-North-Drinking-Water-Report---Part-1---Overview>
(Retrieved 13/3/22)

<https://www.stuff.co.nz/national/politics/128489597/government-accepts-three-waters-recommendations-councils-to-have-shareholding-aspects-of-cogovernance-to-remain> (Retrieved 29/04/22)

<https://www.otago.ac.nz/news/news/otago839477.html> (Retrieved 20/04/22)

TE RAUEMI B: Te whakarohenga me te āhuarangi hurihuri

I ahu mai te 'whakarohenga', hei kupu whakamahere, i ngā whiriwhiringa whakapiki i te whitikina

[Redacted]

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whiriwhiri.

Te mātautanga o te horopaki ki Matatā

Ko tētahi taurira nō nā tata nei kei te kitea i Matatā. I muri i te rere o ngā kōkikī i te tau 2005 i muri

[Redacted]

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huarahi tika.”



RESOURCE B: Zoning and climate change

Zoning as a planning term originated as a means for both increasing residents' access to

[REDACTED]

where retreats take place. Cost is also a factor.

Matatā case study

A recent example can be found in Matatā. Following the 2005 debris flow after a band of

[REDACTED]

think it would get this far. If this is going to be a test case, this is not how to do it.”



Debris flow at Matatā, 2005

Te whakarohenga ā-tāone

I tēnei wā o te āta wānanga a ngā kaihautū maha o te ao i te āhuarangi hurihuri, kua kori ake ōna anō

[Redacted]

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whakarohenga maha, e whakaae ana ki te whakatūnga tonutanga o ngā tūāhanga me te kore i tohea.

Te whakapikinga rohenga i Florida

Nā runga i te kitenga hou ko te whakamahinga tino tika o tētahi moka whenua, e whirinaki ana ki

[Redacted]

[Redacted]

kainoho katoa.

He mihi

He mea whakahāngai ngā kai o ngā mātāpuna e whai ake nei hei whakamahinga i tēnei rauemi:

<https://theconversation.com/when-climate-change-and-other-emergencies-threaten-where-we-live-how-will-we-manage-our-retreat-156035> (He mea tiki i te 29/3/22)

Why Zoning is Key to Combatting Climate Change - Azure Magazine | Azure Magazine (He mea tiki i te 28/3/22)

<https://www.stuff.co.nz/national/300180689/matat-managed-retreat-opponents-settle-reluctantly-and-under-duress> (He mea tiki i te 28/3/22)

<https://resiliencechallenge.nz/wp-content/uploads/2018/07/Hanna-C.-White-I.-Glavovic-B.-2017-Managed-retreat-in-New-Zealand-revealing-the-terminology-approaches-and-direction-of-local-planning-instruments.pdf> (He mea tiki i te 28/3/22)

<https://www.lawsociety.org.nz/news/lawtalk/lawtalk-issue-945/the-proposed-managed-retreat-and-climate-change-act-and-local-authorities/> (He mea tiki i te 28/3/22)

<https://www.c40.org/> (He mea tiki i te 26/3/22)

City zoning

At a time when many leaders around the world contemplate climate action, cities are stepping

infrastructure to continue unchallenged.

Upzoning in Florida

With a renewed appreciation for the fact that the best use for any parcel of land is dependent

aspect of sustainability and opportunities to make more equitable cities for all residents.

Acknowledgements

Material from the following sources has been adapted for use in this resource:

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Why Zoning is Key to Combatting Climate Change - Azure Magazine | Azure Magazine (Retrieved 28/3/22)

<https://www.stuff.co.nz/national/300180689/matat-managed-retreat-opponents-settle-reluctantly-and-under-duress> (Retrieved 28/3/22)

<https://resiliencechallenge.nz/wp-content/uploads/2018/07/Hanna-C.-White-I.-Glavovic-B.-2017-Managed-retreat-in-New-Zealand-revealing-the-terminology-approaches-and-direction-of-local-planning-instruments.pdf> (Retrieved 28/3/22)

<https://www.lawsociety.org.nz/news/lawtalk/lawtalk-issue-945/the-proposed-managed-retreat-and-climate-change-act-and-local-authorities/> (Retrieved 28/3/22)

<https://www.c40.org/> (Retrieved 26/3/22)

TE RAUEMI C: Te tūraru o te kino o te waipukenga me te tūwhita kai

E tūwhita ana te kai mēnā e āhei atu ana ngā tāngata katoa, i ngā wā katoa, taha tinana, taha pāpori,

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Ngā pou e whā o te tūwhita kai

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RESOURCE C: Flood disaster risk and food security

Food security exists when all people, at all times, have physical, social, and economic access to



The four pillars of food security



[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

hauropi e whakamāmātia ai ngā pānga o ngā mōreareatanga nui, ina koa ko te whakahekenga o te ngāhorohorotanga.

He mātaitanga horopaki ā-rohe pātata: Ngā waipukenga i Waitaha– Mei/ Hune 2021

Nō te 28 o Mei 2021 i puta ai he whakaohiti nui i Te Ratonga Tiorangi mō te rohe o Waitaha, me te

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

nuinga atu o ngā whakatika.

He mihi

He mea whakahāngai ngā kai o ngā mātāpuna e whai ake nei hei whakamahinga i tēnei rauemi:

<https://www.oecd-ilibrary.org/sites/68b7e381-en/index.html?itemId=/content/component/68b7e381-en> (He mea tiki i te 6/4/22)

<https://digilab.libs.uga.edu/exhibits/files/original/b66d11d2ba56481404a2f60fd2b56609.jpg> (He mea tiki i te 22/8/22)

<https://thespinoff.co.nz/society/21-02-2022/the-rising-price-of-groceries-and-the-human-cost-of-food-insecurity>
(He mea tiki i te 24/3/22)

<https://www.rnz.co.nz/news/national/452703/flood-costs-farming-couple-1m-as-recovery-grinds-on> (He mea tiki i te 25/3/22)

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impacts of extreme hazards, in particular to reduce erosion.

Local case study: Canterbury floods – May/June 2021

On 28 May 2021, MetService issued a red alert for the Canterbury region forecasting 200–300

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May. While insurance covered repairs to their home, the rest was mostly up to them to sort out.

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<https://www.oecd-ilibrary.org/sites/68b7e381-en/index.html?itemId=/content/component/68b7e381-en> (Retrieved 6/4/22)

<https://digilab.libs.uga.edu/exhibits/files/original/b66d11d2ba56481404a2f60fd2b56609.jpg> (Retrieved 22/8/22)

<https://thespinoff.co.nz/society/21-02-2022/the-rising-price-of-groceries-and-the-human-cost-of-food-insecurity> (Retrieved 24/3/22)

<https://www.rnz.co.nz/news/national/452703/flood-costs-farming-couple-1m-as-recovery-grinds-on> (Retrieved 25/3/22)

English translation of the wording on the front cover

90814MR

Level 2 Education for Sustainability 2022

90814M Demonstrate understanding of aspects of sustainability in different contexts

Credits: Four

RESOURCE BOOKLET

Refer to this booklet to answer the questions for Education for Sustainability 90814M.

Check that this booklet has pages 2–15 in the correct order and that none of these pages is blank.

YOU MAY KEEP THIS BOOKLET AT THE END OF THE EXAMINATION.